

## PAIL/SPLASH GUARD FOR COMMODE

### Field of The Invention

The present invention relates generally to a commode and, more particularly, to the configuration of a combined pail and splash guard that is usable with a commode.

### Background of The Invention

Typically, commodes are regularly used by elderly or infirmed persons to aid in the convenience of use by such persons that cannot use or for some reason find it difficult to use the normal porcelain toilet commonly used in households today. By definition, the use of the word commode and toilet are sometimes used interchangeably for both of the devices and thus, in order to provide clarity, the use of the words hereinafter in the present description will be to use the term commode to describe the present device that is portable and movable to aid the person and the term toilet will be used to describe the typical porcelain device that is of the standard household variety.

With the use of commodes, therefore, there are at least two somewhat independent uses. One is where the commode is serving as an independent device and is interfitted with a pail

having a solid bottom to catch and retain the waste products at any convenient location to the user, such as bedsides. An alternate use, however, of the commode is to move or otherwise position the device to be located physically over the standard toilet so that, in effect, the user has the convenience and comfort of the commode configuration but uses the standard toilet for the disposal of the waste products. In the latter use, obviously, the pail has no bottom and operates more in the form of a splash guard to direct the waste products into that standard toilet. In order to define the two differing, but structurally similar configurations, the generic word "pan" will sometimes be used to describe the device, it being understood that the word "pan" is used to describe the device when the bottom is open and the device is therefore used as a splash guard and to also describe the device when used as a pail when the bottom is closed.

In either case, the more conventional configuration of the opening in the commode seat is a generally circular shape and thus, the pail or splash guard configuration is also circular to interfit underneath and coincide with the opening in the commode seat.

There are presently developed and thus are available commercially, commodes having elongated openings in the commode seat that have a minor axis with a width about the same dimension as the prior circular openings but have an elongated length dimension that is considerable longer in length, thus the configuration is an elongate circle or oval shape. For convenience, the longer axis and dimension will be referred to as the length and the minor axis dimension referred to as the width. The length may thus exceed the width by 4-5 inches. Since, as indicated, the width is about the same dimension as the prior commode seat openings, it can be seen that the overall length of the commodes are extended.

The elongated opening commodes are used in the case of patients with special needs requiring that configuration for the additional space in front of the patient. With the use of such elongated openings, however, a problem arises with respect to the pail or splash guard that can be used with the longer dimensioned opening. The normal diameter of pail or splash guard is

certainly inadequate and, if used, would leave an opening along the peripheral edge at the extended ends of the opening and waste products could thus miss the pail altogether or avoid the splash guard. On the other hand, the circular pail or splash guard cannot simply be enlarged to the dimension of the elongated length as such would also therefore require extending the sides of the commode outwardly to account for the increased diameter and make the commode more inconvenient to use in narrow spaces as is typical of many domestic bathrooms.

Therefore, it would be desirous to have a new configuration of pail or splash guard that can be used with the elongated opening without requiring the width of the commode to be extended and to allow the commode to be used as a splash guard in conjunction with a household toilet to discharge the waste products safely into that toilet.

#### Summary of The Invention

Therefore, in accordance with the present invention, a pail or splash guard is provided that has a unique configuration having an upper generally rectangular opening and a lower, bottom that is preferably circular. As a pail, the bottom is, of course, enclosed to contain the waste products whereas in the splash guard configuration, the bottom is open so that the commode can be used over a household toilet. As used through out the description, the bottom will be referred to as circular in accordance with the preferred embodiment, it being understood that the bottom may be of a wide variety of differing configurations and be within the intent of the present invention. To serve both purposes with the same overall configuration, the circular bottom is displaced with respect to the midpoint of the longitudinal or length dimension. Thus, when the device is used as a splash guard, there is an extended curved front downwardly extending surface forward of the circular bottom to channel the waste product toward the circular opening that is thus is rearwardly disposed with respect to the mid point of the length dimension. In either instance, the upper rectangular configuration is positioned generally contiguous to and closely beneath the elongated opening in the commode seat to assure that all of the waste is collected by the splash guard or pail.

In the preferred embodiment, there is also a peripheral flange extending outwardly from the upper generally rectangular surface of the pail to facilitate the positioning of the pail in the commode.

As such, therefore, the same configuration can be used with the elongated opening type of commode and can easily be manufactured with a bottom for use as a pail or with an opening in the bottom to be used as a splash guard.

Other features and advantage will become apparent to those skilled in the art from a review of the ensuing description while proceeds with reference to the following illustrative drawings.

#### Brief Description of the Drawings

FIG 1 is a perspective, exploded view of a commode having an elongated commode seat opening and having a pail constructed in accordance with the present invention;

FIG. 2 is a perspective view of a commode having an elongated opening and adapted for use with the present pail or splash guard configuration;

FIG. 3A is a side view, partially in cross section, showing a pail having the configuration of the present invention; and

FIG. 3B is a side view, partially in cross section, showing a splash guard having the configuration of the present invention.

#### Detailed Description

Referring now to Fig. 1, there is shown a perspective view of a commode 10 constructed

in accordance with the present invention. As can be seen, commode 10 comprises a pair of inverted U-shaped side frame members 12 that are spaced apart to provide a seating space for the user therebetween in utilizing the commode 10. As used herein, by convention, the front of the commode 10 will be referred to as the direction the user is facing when seated in the commode 10 and thus, in Fig. 1, the frame members 12 are shaped so as to include front legs 14 and rear legs 16, each of which may have flexible cups 18 attached to the bottom of such legs to prevent the commode 10 from slipping on the floor or to form deep indentations in a carpet.

As also can be seen, there is a front frame member 20 and a rear frame member 22, in accordance with the defined convention, and which may also be inverted U-shaped members that are affixed to the side frame members 12 and 14 to create a solid frame to support the user. A back support 24 shaped in the same configuration as the other members is used to provide support for the back of the user, if needed. In addition, there may be arm supports 26 that can be collapsible or movable as desired and, in the position as shown, provide support for the arms of the user when using the commode 10.

A further pair of cross bars 28 complete the structure of the commode 10 and, as will be seen, also provide a support for the pan 30. As indicated, the pan 30 has a multi-functional use, that is, when used as a stand alone commode, the pan 30 has a solid bottom to hold the waste products. When the commode 10 is positioned over a household toilet, the pan 30 has an opening in the bottom to allow all of the waste products to enter the toilet and be disposed of by flushing that toilet.

As can be seen in the Figure, the configuration of the pan 30 is of importance in the present invention and that configuration comprises an upper rim 32 that is formed in a generally rectangular configuration creating an opening 34 in the upper part or top of the pan 30. The pan 30 has a generally arcuate surface extending downwardly from the upper rim 32 to eventually form a generally circular bottom 36 in the preferred embodiment, although other shapes of bottoms can be used. As will also be seen, the generally rectangular configuration has its length disposed from front to back as installed in the commode 10 and its width from side

to side. In general the length is 4-5 inches longer than the width and thus, the generally rectangular opening has predetermined dimensions of its width and length. For clarity, the length dimension has been indicated on the Figure by an L and the width dimension by a W.

The location of the circular bottom 36 is also critical to the present invention as the location, indicated by the centerline C of the generally circular bottom 36 is displaced with respect to the midpoint of the length dimension of the generally rectangular opening, that is, the center of the generally circular bottom 36 is toward the rear of the pan 30 with respect to the midpoint of the length dimension. Obviously as the circular bottom is the preferred embodiment, in the event the shape of the bottom is another configuration, it is important that such shape be displaced rearwardly with respect to the midpoint of the length dimension of the generally with respect to the generally rectangular upper rim of the pan 30. The purpose of the displacement is to allow the pan 30, when used in conjunction with a household toilet, to direct the waste along the longer front arcuate surface 38 so that the commode 10 can be positioned over the toilet to allow the user sufficient room in the front while still capturing and directing all of the waste products rearwardly to be discharged in the center of the toilet at the desired location. Thus the downward sloping arcuate front surface 38 is a more gently sloped surface than the sharp downward rear surface of the pan 30, both surfaces, however, leading eventually to the circular bottom 36.

Thus, as also seen in the figure, the commode seat 40, when installed on the frame, can have an elongated opening 42 for the convenience of the user and yet the pan 30 can easily and fully capture all of the waste products and direct those products to the proper location in the center of the household toilet on which the commode 10 is situated.

In this embodiment, the pan 30 can be readily installed and removed from the commode 10 by means of the outwardly extending peripheral flange 44 and which overlaps the front frame member 20, the rear frame member 22 and the cross bars 28 to hold and support the pan 30 firmly in position contiguous to the elongated opening 42.

Turning now to Fig. 2 there is shown a alternate commode 10 and since many of the components are similar or the same as in the Fig. 1 embodiment, like numbers have been used for like components. In this embodiment, however, the pan 30 is slid into an out of its operative position beneath the commode seat 40 by a downward L-shaped flange 44 beneath and extending along the lateral sides of the elongated opening 42 in the commode seat 40. Thus, rather than lifting the commode seat up to remove the pan 30, it is convenient to install and remove the pan 30 by simply sliding it into and out of its contiguous position beneath the elongated opening 42.

Turning now to Figs 3A and 3B, there are shown, side views, partly in section, showing the pan 30 of the present invention. In the Fig. 3A embodiment, it can be seen that the circular bottom 36 is a solid bottom and therefor the pan 30 is intended for use as a stand alone commode with the pan used as a pail to collect and retain the waste materials. In the Fig. 3B embodiment, there is an opening at 44 in the circular bottom 36 and that embodiment is intended for use where the commode is located over a household toilet such that the waste material is discharged directly into that toilet. As also seen in both Fig. 2A and 2B, the front surface 38 of the pan 32 curves downwardly and the circular bottom 36 is displaced rearwardly with respect to the midpoint of the length dimension L so that the pan 30 can be used with an elongated opening in the commode seat and the curved front surface 38 can direct the waste products rearwardly to the center of the household toilet for discharge into that system.

It is understood that the invention is not limited to the illustrations described and shown herein, which are deemed to be merely illustrative of the best modes of carrying out the invention, and which are suitable of modification of form, size, arrangement of parts and details of operation. The intention rather is intended to encompass all such modifications which are within the spirit and scope and defined by the claims.